

Sub E1  
1. (Amended) A method of operating a node in a communications network, which node is in use connected to signal sources external to the communications network via respectively corresponding links, each link having an associated low level processor feeding signals to one or more higher level processor within the node, there being fewer higher level processors than low level processors, the method comprising:

a) receiving at each low level processor from a respective signal source signals which include a control field, which control field takes one of a plurality of possible values, and the subsequent handling of the said signal by the network being controlled according to the value of the control field;

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b) within a lower level of a messaging protocol running on the low level processors of the node, and prior to the processing of the signal by higher level functions running on a higher level processor of the node, overwriting the control field with a value from a restricted subset of the plurality of possible values; and

c) subsequently processing the signal in the network in dependence upon the said value from the restricted subset of the plurality of possible values.

2. (Amended) A method of operating a communications network comprising:

a) communicating control signals between nodes of the network via respectively corresponding links, each link having an associated low level processor feeding signals to one or more higher level processor within the node, there being fewer

higher level processors than low level processors, which control signals conform to a predetermined signalling protocol;

b) at one of the said nodes, receiving at a low level processor from a signal source external to the network signals conforming to the said predetermined protocol and including a control field, which control field takes one of a plurality of possible values;

c) within said lower level of a messaging protocol running on the node, and prior to the processing of the signal by higher level functions running on the node overwriting the control field with a value from a restricted subset of the plurality of possible values; and

d) subsequently processing the signal in the network in dependence upon the said value from the restricted subset of the plurality of possible values.

8. (Amended) A node suitable for connection in a communications network and comprising:

a) a network interface for connection to the communications network;

b) a signal interface for connection to a signal source external to the communications network via respectively corresponding links, each link having an associated low level processor feeding signals to one or more higher level processor within the node, there being fewer higher level processors than low level processors;

c) means connected to the signal interface for overwriting, within a lower level of a messaging protocol at a low level processor, a control field in a signal received

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via the signal interface from the signal source with one of a subset of predetermined values; and

d) signal processing means for processing the said signal in dependence upon the said one of a subset of predetermined values.

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11. (Twice Amended) A communications network including a node according to claim 8.

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13. (Amended) A method of operating a node in a communications network, which node is in use connected to a signal source external to the communications network via respectively corresponding links, each link having an associated low level processor feeding signals to one or more higher level processor within the node, there being a fewer higher level processors than low level processors, the method comprising:  
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a) receiving at a low level processor from the said signal source signals which include a control field, which control field takes one of a plurality of possible values, and the subsequent handling of the said signal by the network being controlled according to the value of the control field;  
b) overwriting the control field at a low level processor with a value from a restricted subset of the plurality of possible values; and  
c) subsequently processing the signal in the network in dependence upon the said value from the restricted subset of the plurality of possible values.

14. (Amended) A method of operating a communications network comprising:

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- a) communicating control signals between nodes of the network via respectively corresponding links, each link having an associated low level processor feeding signals to one or more higher level processor within the node, there being fewer higher level processors than low level processors, which control signals conform to a predetermined signalling protocol;
- b) at one of the said nodes, receiving at a low level processor from a signal source external to the network signals conforming to the said predetermined protocol and including a control field, which control field takes one of a plurality of possible values;
- c) overwriting at a low level processor the control field with a value from a restricted subset of the plurality of possible values; and
- DS inv.* d) subsequently processing the signal in the network in dependence upon the said value from the restricted subset of the plurality of possible values.

15. (Amended) A method of operating a node in a communications network, which node is in use connected to a signal source external to the communications network via respectively corresponding links, each link having an associated low level processor feeding signals to one or more higher level processor within the node, there being fewer higher level processors than low level processors, the node including a data link layer interface arranged to respond to service request from network layer functions of the node and to issue service requests to the communications network the method comprising:

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a) receiving at a low level processor from the said signal source signals which include a control field, which control field takes one of a plurality of possible values, and the subsequent handling of the said signal by the network being controlled according to the value of the control field;

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b) within the data link layer interface at a low level processor overwriting the control field with a value from a restricted subset of the plurality of possible values; and

c) subsequently processing the signal in the network in dependence upon the said value from the restricted subset of the plurality of possible values.

*Add new claims 21-22:*

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--21. (New) A method of operating a node in a communications network, said node being connected via a plurality of links to a corresponding plurality of neighboring nodes so as to receive messages transmitted from the neighboring nodes, each message including a plurality of fields, said node having a corresponding plurality of low level processing means, each of which is associated with at least one of the plurality of links, and said node further including higher level processing means, the method comprising:

each low level processing means comparing one or more of the fields of each of the incoming messages received on its respective link with prestored permissible values for each respective field and, in the event that at least one field holds an impermissible value, taking corrective action;

wherein incoming messages which have been processed by the low level processing means are forwarded to the higher level processing means for further processing and wherein the higher level processing means receives processed messages from a plurality of the low level processing means.

22. (New) A method as in claim 21 wherein the corrective action taken in the event that at least one field holds an impermissible value is to overwrite the or each impermissible value with a permissible value.

23. (New) A node suitable for connection in a communications network and comprising:

a common high level processor or group of processors;

a network interface for connection to the communications network;

an external interface for connection to nodes external to the communications network via respectively corresponding links for receiving messages therefrom; and

a plurality of low level processors connected to the external interface and operable to process messages received from the external nodes and to feed the processed messages on to the common high level processor or group of processors, each low level processor being operable to compare at least one field within each message received with a set of

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*Revised* permissible values for that field and to take corrective action in the event that the comparison indicates that the field contains an impermissible value.

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